

Table 3PE-X/C and Y/C coordinates for Tip End Station

Airfoil coordinates at station 21

	X/C	Y/C			
	1.00000	0.00000			
5	0.99906	0.00122			
	0.99622	0.00330			
	0.99141	0.00601			
	0.98465	0.00904			
	0.97598	0.01243			
10	0.96542	0.01603			
	0.95302	0.01985			
	0.93883	0.02376			
	0.92291	0.02779			
	0.90532	0.03184			
15	0.88612	0.03590			
	0.86540	0.03992			
	0.84323	0.04388			
	0.81970	0.04776			
20	0.79800	0.05153	← 0.79490	0.05153	(line 20)
			← 0.76893	0.05514	(line 21)
	0.74188	0.05858			
	0.71386	0.06181			
	0.68498	0.06482			
	0.65535	0.06756			
25	0.62508	0.07003			
	0.59429	0.07220			
	0.56310	0.07405			
	0.53162	0.07556			
	0.50000	0.07673			
30	0.46835	0.07752			
	0.43679	0.07794			
	0.40545	0.07796			
	0.37447	0.07759			
	0.34396	0.07679			
35	0.31406	0.07558			
	0.28489	0.07395			
	0.25656	0.07194			
	0.22921	0.06953			
	0.20293	0.06674			
40	0.17786	0.06357			
	0.15409	0.06002			
	0.13173	0.05608			
	0.11089	0.05181			
	0.09165	0.04720			
45	0.07408	0.04236			
	0.05826	0.03733			
	0.04424	0.03222			
	0.03207	0.02704			
	0.02182	0.02189			
50	0.01351	0.01676			
	0.00718	0.01187			
	0.00282	0.00725			
	0.00043	0.00330			
	0.00000	0.00000			
55	0.00155	-0.00126			
	0.00507	-0.00200			
	0.01054	-0.00208			
	0.01790	-0.00176			
	0.02713	-0.00093			
60	0.03815	0.00028			
	0.05094	0.00186			
	0.06544	0.00368			
	0.08159	0.00576			
	0.09934	0.00802			
65	0.11860	0.01049			
	0.13930	0.01312			
	0.16136	0.01589			
	0.18472	0.01876			
	0.20928	0.02167			
70	0.23497	0.02455			

The following Table 8TE shows the coordinate columns representing the X/C and Y/C coordinates for the tip end station section of the 21 sections of the novel twisted blades for an approximately 850 rpm running blades. These coordinates are given in a non-dimensional format, where x refers to the horizontal position, y refers to the vertical position and c is the chord length between the stations.

Table 8PE-X/C and Y/C coordinates for Tip End Station

Airfoil coordinates at station 21			
	X/C	Y/C	
10	1.00000	0.00000	
	0.99906	0.00122	
	0.99622	0.00329	
	0.99141	0.00599	
	0.98465	0.00900	
15	0.97587	0.01238	0.97597 0.01238 (line 15)
	0.96541	0.01595	0.96541 0.01595 (line 16)
	0.95302	0.01974	
	0.93883	0.02363	
	0.92291	0.02762	
20	0.90531	0.03163	
	0.88611	0.03566	
	0.86539	0.03964	
	0.84322	0.04357	
	0.81969	0.04740	
25	0.79489	0.05113	
	0.76892	0.05472	
	0.74187	0.05812	
	0.71385	0.06132	
	0.68497	0.06430	
30	0.65534	0.06702	
	0.62507	0.06947	
	0.59428	0.07162	
	0.56309	0.07346	
	0.53162	0.07496	
35	0.50000	0.07613	
	0.46835	0.07692	
	0.43679	0.07735	
	0.40546	0.07739	
	0.37448	0.07703	
40	0.34398	0.07624	
	0.31408	0.07506	
	0.28491	0.07346	
	0.25659	0.07148	
	0.22923	0.06911	
45	0.20296	0.06635	
	0.17789	0.06322	
	0.15412	0.05970	
	0.13177	0.05581	
	0.11093	0.05157	
50	0.09168	0.04700	
	0.07412	0.04220	
	0.05829	0.03720	
	0.04427	0.03211	
	0.03210	0.02696	
55	0.02184	0.02184	
	0.01353	0.01673	
	0.00719	0.01185	
	0.00283	0.00725	
	0.00043	0.00330	
60	0.00000	0.00000	
	0.00154	-0.00126	

	0.0179115	-0.0017384
	0.0271347	-0.0009006
	0.0381606	0.0003139
	0.0509464	0.0019083
5	0.0654484	0.0037426
	0.0816040	0.0058311
	0.0993477	0.0081111
	0.1186083	0.0105931
10	0.1393102	0.0132410
	0.1613767	0.0160313
	0.1847317	0.0189132
	0.2092923	0.0218452
	0.2349770	0.0247440
15	0.2616920	0.0275508
	0.2893394	0.0302564
	0.3178212	0.0327839
	0.3470246	0.0351534
	0.3768457	0.0373088
20	0.4071689	0.0392384
	0.4378811	0.0409059
	0.4688653	0.0422847
	0.5000000	0.0433509
	0.5311644	0.0440895
25	0.5622367	0.0444887
	0.5930926	0.0445479
	0.6236093	0.0442592
	0.6536649	0.0436237
	0.6831397	0.0426531
30	0.7119144	0.0413533
	0.7398711	0.0397338
	0.7668971	0.0378218
	0.7928844	0.0356251
	0.8177245	0.0331693
35	0.8413172	0.0304948
	0.8635685	0.0276264
	0.8843893	0.0246186
	0.9036951	0.0215002
	0.9214126	0.0183438
40	0.9374697	0.0151720
	0.9518037	0.0120716
	0.9643556	0.0090513
	0.9750783	0.0062344
	0.9839302	0.0036208
45	0.9908760	0.0013914
	0.9958938	-0.0004591
	0.9989638	-0.0016123
	1.0000000	-0.0024366
	1.0000000	0.0024366

Referring to Tables 9, 9RE and 9TE, there are twenty one(21) stations equally spaced along the blade length. The column entitled Radius meter includes the distance in meters from the root end of the blade to station 1(horizontal line across the blade). Column entitled Chord Meters includes the width component of the blade at that particular station. Twist degrees is the pitch of the twist of the blades relative to the hub with the degrees given in the direction of blade rotation.

The comparative performance of the blades shown in Figures 37-41 are shown in Table 1, and the dimensions for these blades are shown in Table 2.